Resource Summary Report

Generated by PRECISE-TBI on Sep 1, 2026

Orai1-GCaMP6f

RRID:Addgene_73564
Type: Plasmid

Proper Citation

RRID:Addgene_73564

Plasmid Information

URL: http://www.addgene.org/73564

Proper Citation: RRID:Addgene_73564

Insert Name: Orai1-GCaMP6f

Organism: Homo sapiens

Bacterial Resistance: Kanamycin

Defining Citation: PMID:26712003

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:3958; Vector Backbone:pEGFP-N1; Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

Comments: The fusion protein in this plasmid contains the genetically encoded calcium indicator GCaMP6f from the plasmid pGP-CMV-GCaMP6f (Addgene plasmid # 40755) provided by Douglas Kim. Note that the hOrai1 gene isolated in the Cahalan lab contains a silent mutation/polymorphism (T798C; aa T266).

Plasmid Name: Orai1-GCaMP6f

Record Creation Time: 20220422T222450+0000

Record Last Update: 20260829T081004+0000

Ratings and Alerts

No rating or validation information has been found for Orai1-GCaMP6f.

No alerts have been found for Orai1-GCaMP6f.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 6 mentions in open access literature.

Listed below are recent publications. The full list is available at PRECISE-TBI .

Woo MS, et al. (2024) STING orchestrates the neuronal inflammatory stress response in multiple sclerosis. Cell, 187(15), 4043.

West SJ, et al. (2022) S-acylation of Orai1 regulates store-operated Ca2+ entry. Journal of cell science, 135(5).

Kodakandla G, et al. (2022) Dynamic S-acylation of the ER-resident protein stromal interaction molecule 1 (STIM1) is required for store-operated Ca2+ entry. The Journal of biological chemistry, 298(9), 102303.

Jazbec V, et al. (2022) Proteolytically Activated CRAC Effectors through Designed Intramolecular Inhibition. ACS synthetic biology, 11(8), 2756.

Maneshi MM, et al. (2020) Orai1 Channels Are Essential for Amplification of Glutamate-Evoked Ca2+ Signals in Dendritic Spines to Regulate Working and Associative Memory. Cell reports, 33(9), 108464.

Gutzeit VA, et al. (2019) Conformational dynamics between transmembrane domains and allosteric modulation of a metabotropic glutamate receptor. eLife, 8.